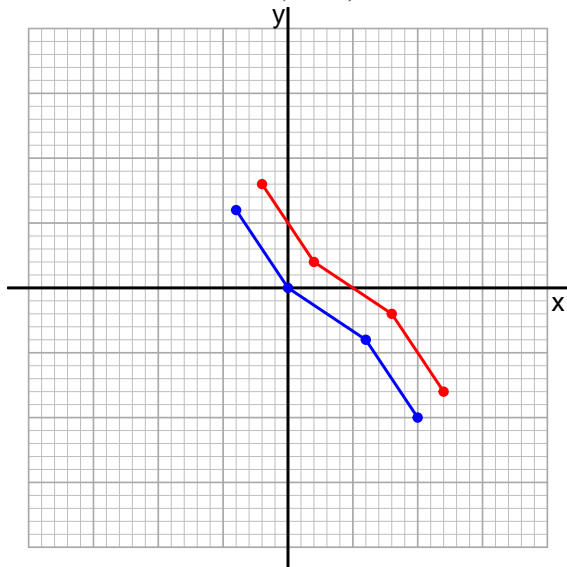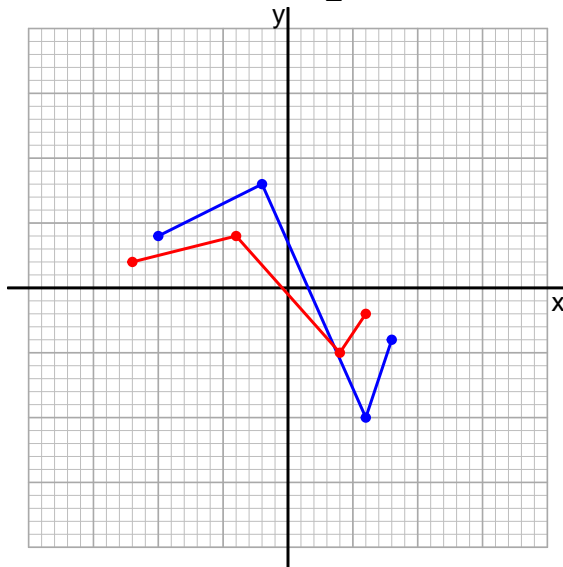1. Each of the curves below represent a different $y = f(x)$. For each, draw a second curve, $y = g(x)$, defined by the equation above the graph.
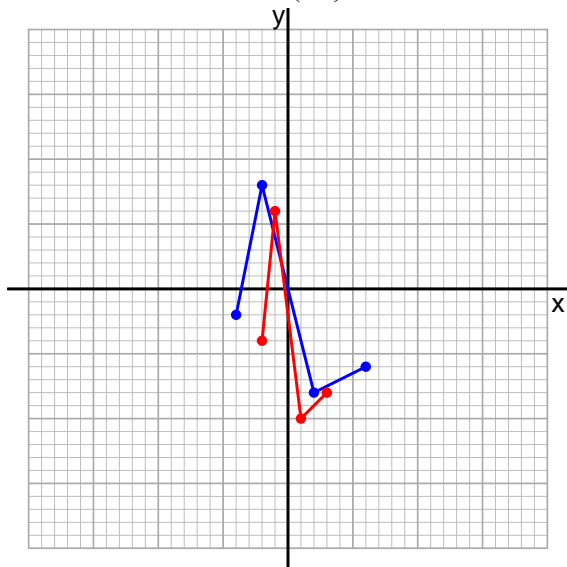
$$g(x) = f\left(x - 2\right) + 2$$
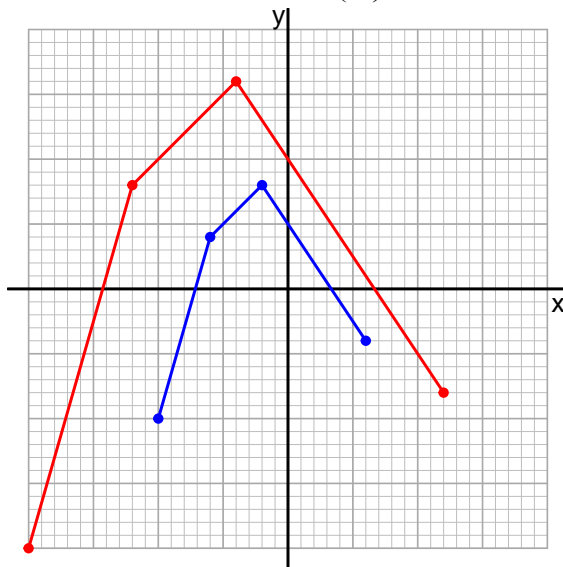
$$g(x) = \dfrac{f\left(x + 2\right)}{2}$$
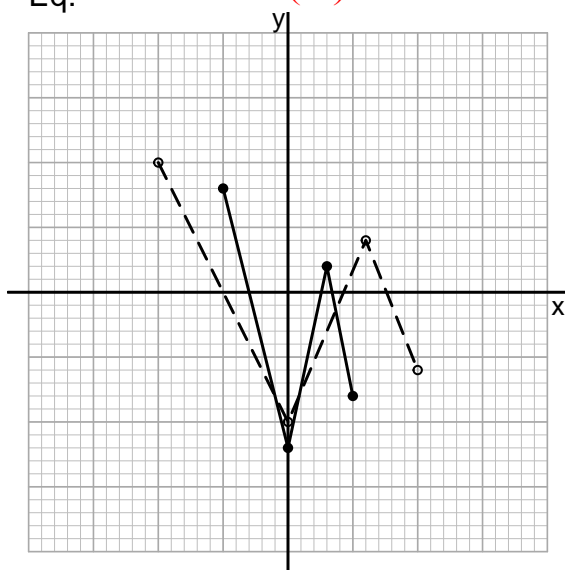
$$g(x) = f\left(2x\right) - 2$$

$$g(x) = 2 \cdot f\left(\dfrac{x}{2}\right)$$

1

2. On each graph below, curve $y = f(x)$ is shown as a dashed line with open dots at key points, and curve $y = g(x)$ is shown as a solid line with closed dots at key points. For each, write an equation that defines $g(x)$ as a transformation of $f(x)$.
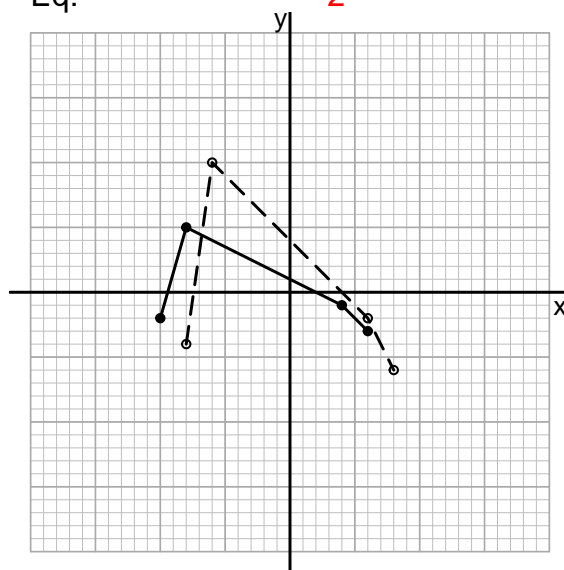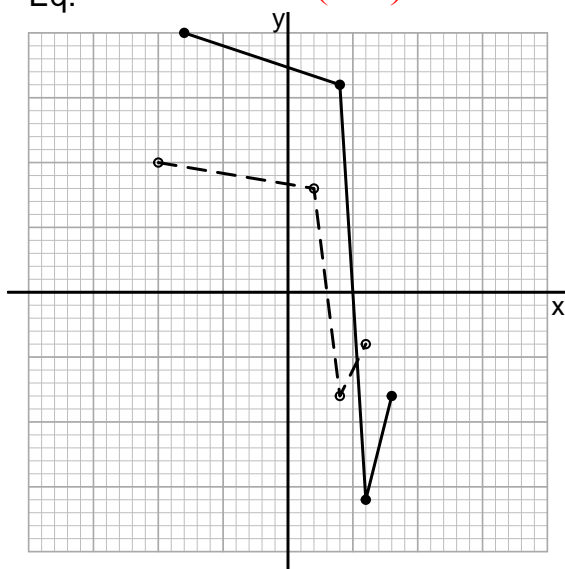
Eq: $g(x) = f\left(2x\right) - 2$

Eq: $g(x) = \dfrac{f\left(x+2\right)}{2}$

Eq: $g(x) = 2 \cdot f\left(x-2\right)$

Eq: $g(x) = f\left(\dfrac{x}{2}\right) + 2$

2